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ABSTRACT

A study investigated whether children could be sensitized to structural aspects of narratives and whether reading comprehension could be enhanced through instruction designed to develop concept of story. Twenty fourth grade students with a poorly developed concept of story were assigned to either a control or an experimental group. The experimental group received instruction in story structure and learned the names and functions of the parts of the J. M. Mandler and N. S. Johnson story grammar (setting, beginning, complex reaction, attempt, outcome, and ending). They then identified these parts in stories and created specific story elements to follow given elements. They also reordered scrambled stories and told or wrote stories according to the grammar. The control group received instruction in dictionary usage. All the students completed a production task in which they read only a story setting and then wrote the best story they could from it. They next read two scrambled stories and told them back the following day. The students also answered comprehension questions. The results showed that with relatively little instruction, the concept of story of fourth grade students who were poor readers could be enhanced. Furthermore, the findings revealed that when concept of story was enhanced, comprehension improved. (FL)

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Elevating Comprehension Skills by Sensitizing Students to Structural Aspects of Narratives

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Elevating Comprehension Skills by Sensitizing Students to Structural Aspects of Narratives

Recent research has shown that both adults and children do have a sense of an idealized story, that is, a sense of story structure, and that they use this concept of story when called upon to understand and remember stories (Mandler, 1978; Mandler & Johnson, 1977; Rumelhart, 1978; Stein, 1976; Stein & Glenn, 1977; Thorndyke, 1977). There have been only a few documented attempts (Cunningham & Foster, 1978; Dreher & Singer, 1980), however, to improve children's concept of story through direct instruction or to determine the effect of such instruction on reading comprehension. The present study was designed for two purposes: 1) to determine if children can be sensitized to structural aspects of narratives; that is, to determine if their concept of story can be enhanced; and 2) to find out if reading comprehension is enhanced through instruction designed to develop concept of story.

Method

Subjects

Using grade level scores on the California Achievement Test, the 50 least able fourth grade readers (excluding those who scored below second grade level) were identified from a pool of 100. These 50 students were then screened to determine which of them had a poorly developed concept of story. Twenty students were identified as having a poorly developed concept of story. These 20 students became the subjects of the study and were randomly assigned to either the control or experimental group, with 10 subjects in each group. The CAT grade level scores for the subjects in the experimental group had a range of 2.8 to 4.0, with a mean of 3.57. For the control group the range was 2.6 to 4.0, with a mean of 3.43.

Instruments and scoring procedures

Instruments to assess concept of story and comprehension of stories were developed, following the principles of generalizability theory (Cronbach et al., 1963). Administration of all measures was counterbalanced.

Concept of story. Mandler and Johnson's (1977) description of the structure of a story was used in this study. According to their description, there are six categories of information contained in stories: Setting, Beginning (a precipitating event), Complex Reaction (the protagonist's reaction to the precipitating event and the establishment of a goal), Attempt (efforts made to achieve the goal), Outcome (the success or failure of the attempt), and Ending (long-range consequences of the action).

After a pilot study, two tasks, a production task and a task in which a scrambled story was recalled after a 24-hour delay, were selected to assess the concept of story possessed by an individual. Two tasks were used rather than one in order to view concept of story from more than one perspective. For each task four stories were developed, two to be used for screening and two to be used for post testing. This was done to avoid the possibility that results of the study might be story-specific if only one story were used in each task.

For the production task, subjects read only a story setting and then were asked to finish the story, making it into the best story they could. For screening for concept of story, students were tested individually and oral responses were gathered. For post testing, group-administered, written measures were used. Responses were rated according to a modification of a categorization system developed by Stein & Glenn (1977) in which stories produced by children are classified as belonging to one of five categories. These categories range from a descriptive sequence, which merely describes the activities and/or surroundings of the protagonist using few causal connections and without any real goal direction, through reactive episodes, abbreviated episodes, and complete stories, to complex stories containing multiple episodes. For this study, Mandler & Johnson's (1977) grammar was used to describe the parts of the children's stories. A score of 0 was given for no response. A score of 1 was given for a descriptive sequence, a 2 for a reactive episode, and so on. Interrater reliability for the scoring of the production responses was .77 for the screening measures and .87 for post testing measures.

For the second concept of story task, subjects read two scrambled stories written at the second grade level. The next day they were asked to tell back each story, making it into a good story. Interrater reliability for dividing the scrambled stories into statements (roughly analagous to a sentence) ranged from .93 to 1.0. Interrater reliability for parsing the stories ranged from .94 to 1.0. Again responses were rated according to the Stein & Glenn categorization system, using the original story as a template. Interrater reliability was .87 for the screening measures and .90 for post testing measures.

The scores for the two stories for the production task were collapsed to yield one total production score. A similar procedure was used for the scrambled story task. For screening, students who had total scores on both concept of story measures in the lowest three categories were considered to have a poorly developed concept of story.

Comprehension. To assess comprehension of stories at the end of instruction, each student was asked to read two 400-word stories and to answer in writing nine literal and eight inferential questions about each story. The stories were taken from a fourth grade basal never used in the state. The stories had been rewritten at the mid-second grade level, according to the Fry readability formula. The stories were well-formed in the sense that they followed the rules of the Mandler & Johnson description of an idealized story. Interrater reliability for identifying the categories in the two stories was .85 and .96. The .85 estimate of reliability was due to the different placement of one paragraph by the two investigators.

The questions for the stories were generated by following a procedure developed by Hansen & Pearson (1980), which included Bormuth's procedures (1969) for generating questions.

Answers to the questions were scored both by a strict criterion and by a set of loose criteria. Using the strict criterion, an answer was scored as either right or wrong. Using the loose criteria, subjects could receive partial credit for an answer, with a possible score of 0-3 for each item. The strict criterion scores for both stories were combined for a total strict score, as were the loose criteria scores. Interrater reliability for scoring using the strict criterion was .94; for the loose criteria, interrater reliability was .89.

Design and procedures

The design of the study was a two-group (control vs. experimental) post test only design. After the 20 subjects who had been identified as having a poor concept of story had been randomly assigned to the experimental or control group, six sessions of intensive instruction took place. Both groups met at the same time but in alternating locations for equal periods (30-45 minutes) of daily instruction. Both groups met with each instructor (the two investigators and a doctoral student) for an equal number of times.

The experimental group received instruction in the structure of stories. The experimental subjects learned the names and functions of the parts of the Mandler & Johnson grammar; they identified these parts in short stories; they created specific story elements to follow given elements. The subjects completed macro-cloze exercises in which they had to identify which element in a story was missing (such as the Goal

statement) and to supply the missing element. They re-ordered scrambled stories and wrote or told stories according to the grammar. (Specific descriptions of procedures to teach concept of story may be found in Whaley [in press].)

The control group received instruction in dictionary usage. They interpreted phonetic respellings, located and used pronunciation keys, and used the dictionary to decide if a word had been used appropriately in a sentence. In order to insure that the results of the study were not due merely to additional practice in the reading and writing of stories by the experimental group, the control group read the same practice stories and did the same amount of writing as the experimental group.

After the instructional period, testing of concept of story and of comprehension of stories took place.

Results

The two main questions of the study were: 1) Can concept of story be enhanced and 2) Can comprehension be enhanced through direct instruction in story structure?

Concept of story

To determine if concept of story was enhanced for the experimental group, a multivariate analysis of covariance was performed. The production and scrambled story total scores for post measures served as a multivariate set of dependent variables for concept of story. The production and scrambled story total scores from the screening measures were used as covariates because they were readily available and might increase the sensitivity of the analyses. Tables 1 and 2 show the group means on these measures.

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The multivariate analysis of covariance showed that concept of story for the experimental group was significantly better than that of the control group ($F = 11.06$; $p < .01$). Because the multivariate test was significant, univariate analyses of covariance were performed. These analyses indicated that the difference between the groups was largely attributable to performance on the production task. The mean scores on the production task were significantly higher for the experimental group ($F = 23.35$, $p < .001$). However, no significant differences were found for the scrambled story task.

Comprehension of stories

Two univariate analyses of variance were done to assess the effect of instruction in story structure on reading comprehension, one analysis for strict criterion total comprehension scores and one for loose criteria total scores. These scores may be found in Table 2. The experimental group performed significantly better on both comprehension measures. For the strict criterion scores, $F = 7.48$, $p < .05$; for the loose criteria scores, $F = 10.25$, $p < .01$.

Discussion

The results of this study show that with relatively little instruction the concept of story of fourth graders who are not above average readers can be enhanced. Furthermore, when concept of story is enhanced, comprehension of stories is also enhanced.

These findings have implications for both classroom instruction and for research in the area of concept of story. For instruction,

these findings suggest one promising form of comprehension instruction, at least for well-formed stories. Teachers could sensitize students through direct instruction to the elements of stories and then could help these readers transfer this knowledge about idealized stories to their own reading, whether in basal readers or trade books. More research is needed to determine if the kinds of instruction utilized in this study are effective with both older and younger subjects. In addition, the effects of such instruction on students' writing of stories needs to be investigated.

The present study also has implications for research in the area of concept of story. The procedures used in this study suggest potential ways to assess an individual's concept of story.

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